

REMARKS

Claims 1-3, 5-8, 10, 13, 15-17, 19 and 20 are presented for reconsideration and withdrawal of the rejections set forth in the Office Action dated March 30, 2009, and further examination in view of the foregoing amendments and following remarks.

In the outstanding Office Action, the Examiner rejected claims 1-3, 5-11, 13-17, 19 and 20 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; and rejected claims 1-3, 5-11, 13-17, 19 and 20 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner objected to claims 6 and 19 for informalities and required appropriate correction.

In the outstanding Office Action, the Examiner rejected claims 1, 2, 6-10, 14 and 19 under 35 U.S.C. §103(a) as being unpatentable over Great Britain Patent No. 1 214 330 to Baldwin-Ehret-Hill Inc. (hereinafter referred to as “B-E-H”) in view of Great Britain Patent No. 2 032 845 to Seitz (hereinafter referred to as “Seitz”); rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 1 above, in view of U.S. Patent No. 3,824,140 to Hofmann (hereinafter referred to as “Hofmann”); rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 2 above, in view of U.S. Patent No. 5,056,564 to Roth (hereinafter referred to as “Roth”); rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 9 above, in view of Roth; rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,576,206 to Lauren (hereinafter referred to as “Lauren”) in view of Seitz; rejected claims 9, 15, 16 and 20 under 35 U.S.C. §103(a) as being unpatentable

over U.S. Patent No. 3,346,016 to Blau et al. (hereinafter referred to as “Blau et al.”) in view of Seitz and B-E-H; and rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 9 above, in view of U.S. Patent No. 5,457,136 to Hartranft et al. (hereinafter referred to as “Hartranft et al.”).

By this Amendment, claims 1, 6, 10, 13, 15 - 17, 19 and 20 have been amended. Claims 9, 11 and 14 have been canceled without prejudice or disclaimer to the contents therein. Claims 4, 12 and 18 were previously canceled without prejudice or disclaimer. In this regard, Applicants note that the dependency of claims 10, 15 - 17 and 20 have been amended from now-canceled claim 9 to still-pending claim 1. Applicants, by amending or canceling any claims, make no admission as to the validity of any rejection made by the Examiner against any of these claims. Applicants reserve the right to reassert the original claim scope of any claim amended or canceled in a continuing application. Claims 1, 6, 13 and 19 have been amended for the sole purpose of correcting typographical errors or to explicitly clarify features objected to or rejected by the Examiner under 35 U.S.C. §112, second paragraph. Thus, the amended claims clarify the subject matter recited in the rejected claims. It is respectfully submitted that the above amendments introduce no new matter within the meaning of 35 U.S.C. §132.

Claim Objections

In the outstanding Office Action, the Examiner objected to claims 6 and 19 for informalities and required appropriate correction. Specifically, the Examiner objected to the omission of the word “or” between “glass nonwoven” and “a woven...glass fibre fabric.”

Response

Applicants respectfully submit that the omission of the word “or” between “glass nonwoven” and “a woven...glass fibre fabric” was a typographical error and have corrected claims 6 and 19 accordingly. Amended claim 6 recites “Process according to Claim 1, characterized in that the reinforcing layer is a glass nonwoven or a woven glass fibre fabric.”

Claim 19 has been similarly amended to recite “Process according to Claim 1, characterized in that the reinforcing layer is a glass nonwoven or a woven E-glass fibre fabric.”

Accordingly, Applicants respectfully submit that amended claims 6 and 19 obviate the objections thereto. Applicants respectfully request the Examiner to reconsider and withdraw the objections thereto.

Claim Rejections under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 1-3, 5-11, 13-17, 19 and 20 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner asserts in §§ 4-5 of the Office Action various rejections under 35 U.S.C. 112, first paragraph regarding the phrasing “outer sheath reinforcing layer,” “continuous” and that the “trickle guard is wound ‘fully’ circumferentially” of claims 1, 9 and 13.

Response

By this Response and Amendment, claims 1 – 3, 5 – 8, 10, 13, 15 – 17, 19 and 20 have

been amended or depend from amended claims and, as amended, the rejections thereto are respectfully traversed. Claims 9, 11 and 14 have been canceled without prejudice or disclaimer to the contents therein. Therefore, the rejections thereto are moot.

Applicants respectfully traverse this rejection. In §5 of the Office Action, the Examiner indicates that he has failed to find the exact terms or a definition for the exact same terms in the specification (“[t]here does not appear to be support for the recitation of ‘continuous’ given that this term is not mentioned or defined in the specification”). Applicants respectfully submit that such a requirement is unnecessary and improper. MPEP § 2163.02, states, *inter alia*, that “[t]he subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement.”

Applicants respectfully submit that the original specification, figures and claims clearly support the above rejected terms. In particular, Applicants respectfully note that with respect to the Examiner rejected phrasing of “outer sheath reinforcing layer,” support may be found at least on page 10, lines 4-12 of the original specification as filed and in the modification of original claim 1 to further clarify which layer is the “the reinforcing layer added to the trailing end of the nonwoven web” after deletion of the reference numerals from the claims. With respect to the Examiner rejected phrasing of “continuous,” support may be found at least on page 9, lines 23-26 of the original specification and in Fig. 1, Fig. 4, etc. Finally, with respect to the Examiner rejected phrasing that the “trickle guard is wound ‘fully’ circumferentially,” support may be found at least on page 7, lines 16-18 and page 10, lines 4-12 of the original specification. In view of the clear support found within the original disclosure, and as the terms may be understood by

one of ordinary skill in the art, Applicants further respectfully submit that these terms do not require special definition. For example, *inter alia*, “‘fully’ circumferentially” does not require explicit definition, as its meaning would be easily understood at least through the plain and ordinary meaning of circumference to one of ordinary skill in the art.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejections of claims 1 and 13, and claims 2, 3, 5 – 8, 10, 15 – 17, 19 and 20, dependent therefrom, under 35 U.S.C. §112, first paragraph.

Claim Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1-3, 5-11, 13-17, 19 and 20 under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, §§ 6-7 of the Office Action describe various rejections under 35 U.S.C. 112, second paragraph regarding the phrasing “trailing end,” “continuous” and “a continuous nonwoven web.” The Examiner asserted that “it is unclear what portion of the nonwoven web is considered to be the ‘trailing end’ – the last ¼ of the layer, the last 1/10 of the layer... the term ‘continuous’ renders the claims indefinite because it is unclear what is meant by this term...it is not clear how a pipe sleeve can comprise a continuous nonwoven web, i.e. while the pipe sleeve can be made from a continuous web, it is not clear how the pipe sleeve itself has a continuous web.”

Response

By this Response and Amendment, claims 1 – 3, 5 – 8, 10, 13, 15 – 17, 19 and 20 have

been amended or depend from amended claims and, as amended, the rejections thereto are respectfully traversed. Claims 9, 11 and 14 have been canceled without prejudice or disclaimer to the contents therein. Therefore, the rejections thereto are moot.

MPEP § 2111 states, *inter alia*, “During patent examination, the pending claims must be ‘given their broadest reasonable interpretation consistent with the specification.’ The Federal Circuit’s *en banc* decision in *Phillips v. AWH Corp.*...expressly recognized that the USPTO employs the “broadest reasonable interpretation” standard:

The Patent and Trademark Office (“PTO”) determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004).

Thus, with respect to “trailing end,” Applicants respectfully refer to the paragraph on page 10, lines 4-12 of the original specification discussing the trailing end, and submit that as the Examiner is to read the claims in light of the specification, one of ordinary skill in the art would also clearly understand the phrase “trailing end” in view of the specification. Similarly, with respect to “continuous” and “a continuous nonwoven web,” Applicants refer to the citations of the original disclosure discussed above.

Applicants do not agree with the Examiner’s rejections. However, in the interest of expediently advancing prosecution, Applicants submit claim amendments clarifying the above discussed features. For example, claim 1 has been amended to explicitly recite language of the original specification discussing the trailing end respective to the outer sheath reinforcing layer,

and claim 13 has been amended to explicitly recite “a roll of continuous nonwoven web,” which is clearly shown by the original specification. Applicants submit that the above amendments remove all grounds for rejection under 35 U.S.C. §112, second paragraph. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejections of claims 1 and 13, and claims 2, 3, 5 – 8, 10, 15 – 17, 19 and 20, dependent therefrom, under 35 U.S.C. §112, second paragraph.

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 1, 2, 6-10, 14 and 19 under 35 U.S.C. §103(a) as being unpatentable over B-E-H in view of Seitz; rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 1 above, in view of Hofmann; rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 2 above, in view of Roth; rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 9 above, in view of Roth; rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Lauren in view of Seitz; rejected claims 9, 15, 16 and 20 under 35 U.S.C. §103(a) as being unpatentable over Blau et al. in view of Seitz and B-E-H; and rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 9 above, in view of Hartranft et al.

Response

Claims 1 – 3, 5 – 8, 10, 13, 15 – 17, 19 and 20 have been amended or depend from

amended claims and, as amended, the rejections thereto are respectfully traversed. Claims 9, 11 and 14 have been canceled without prejudice or disclaimer to the contents therein. Therefore, the rejections thereto are moot.

These rejections are traversed as Applicants submit that the prior art references do not disclose numerous novel features of the presently claimed subject matter. In order to establish a *prima facie* case of obviousness, the Examiner must show that the prior art references teach or suggest all of the claim features. *Amgen, Inc. v. Chugai Pharm. Co.*, 18, USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ2d 494, 496 (CCPA 1970).

Applicants respectfully traverse these rejections since the Examiner has not made a *prima facie* case of obviousness. Obviousness under 35 U.S.C. §103 is a question of law, with underlying factual considerations regarding (1) the scope and content of the prior art, (2) the differences between the prior art and the claimed invention, (3) the level of ordinary skill in the art, and (4) any relevant secondary considerations. *Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984, 991 (Fed. Cir. 2009) *citing Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966). 35 U.S.C. §103 bars patentability unless “the improvement is more than the predictable use of prior art elements according to their established functions.” *In re Kubin*, 561 F.3d 1351, 1360 *citing KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

Overview

Amended claim 1 recites:

Process for producing pipe sleeves made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, comprising:

- a) providing a continuous nonwoven web made of mineral wool which is provided with an uncured binder;
- b) winding up the nonwoven web on a winding mandrel of a winder;
- c) curing the binder;

feeding at least one reinforcing layer into the winder before the nonwoven web runs into the winder, thereby providing said at least one reinforcing layer before inclusion of the nonwoven web in the pipe sleeve, and providing said at least one reinforcing layer in such a way that during the winding said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result; and

providing an outer sheath reinforcing layer added to a trailing end section of the nonwoven web such that a leading end of the outer sheath reinforcing layer overlaps the trailing end section of the nonwoven web, after providing the reinforcing layer in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as an outer layer, the outer sheath reinforcing layer arranged around the full circumference, completely circumferentially around the coil.

Amended claim 13 recites:

Pipe sleeve made of mineral wool for sound-level reduction in pipeline systems, in particular of heating installations or ventilation systems, characterized in that:

said pipe sleeve has at least one reinforcing layer which provides the inner surface of the pipe sleeve that determines the clear internal diameter of the pipe sleeve,

a roll of continuous nonwoven web made of mineral wool,

an outer sheath reinforcing layer in the form of a trickle guard is wound circumferentially around said pipe sleeve, the outer sheath added to a trailing end of the roll of continuous nonwoven web and wound fully circumferentially around the roll of continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the roll of continuous nonwoven web, and

the outer sheath reinforcing layer provided as one of or a combination of a glass nonwoven or a woven glass fibre fabric; or includes one of a particulate material, a particulate infrared radiation absorbing material or a particulate heat shielding material; or includes one of a foil material, or a heat reflective foil containing a metal; or is treated with a biocide agent.

B-E-H discloses (page 3, lines 33-35) that “the pipe cover 10 is formed by spirally winding super-imposed mats of different fibrous materials into a tubular form....” Under correct consideration of the cited paragraphs on B-E-H page 3, lines 35-40, Applicants respectfully submit that the complete teaching in this regard is that superimposed *mats* of different fibrous material are spirally wound into a two layer form with one layer being the outer layer and made of glass fibers, while the other layer creating the intermediate layers is made of mineral wool.

Rejection of claims 1, 2, 6-10, 14 and 19 over B-E-H in view of Seitz

Claims 1, 2, 6 - 8, 10 and 19 have been amended or depend from amended claims and, as amended, the rejections thereto are respectfully traversed. Claims 9 and 14 have been canceled without prejudice or disclaimer to the contents therein. Therefore, the rejections thereto are moot.

Applicants traverse these rejections as B-E-H fails to disclose, teach or suggest:

providing a *continuous* nonwoven web made of mineral wool... winding up the nonwoven web on a winding mandrel of a winder... *feeding at least one reinforcing layer into the winder before the nonwoven web runs into the winder*... in such a way that during the winding said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result; and *providing an outer sheath reinforcing layer added to a trailing end of the nonwoven web such that a leading end of the outer sheath reinforcing layer overlaps the trailing end section of the nonwoven web* ... in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as an outer layer, *the outer sheath reinforcing layer arranged around the full circumference, completely circumferentially around the coil*

as recited in amended claim 1 (emphases added).

Firstly, the independent claims recite that the nonwoven web is provided continuously, as supported in the original specification and figures, further reinforced through the use of first and

second supply belts and a winding mandrel. In contrast to the presently claimed subject matter, the mats of B-E-H fail to disclose, teach or suggest a “[p]rocess for producing pipe sleeves made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, comprising... *providing a continuous nonwoven web* made of mineral wool which is provided with an uncured binder” (emphases added) as recited in claim 1.

As discussed above, Applicants respectfully submit that B-E-H does not disclose, teach or suggest “providing a continuous nonwoven web made of mineral wool” as recited in claim 1. The Examiner has cited page 3, lines 35-40 and page 3, lines 55-60 of B-E-H as supporting such disclosure, but lines 35-40 disclose only that “the outer layer L_f and every other layer being made of glass fibre and the intermediate layers L_m between the glass fibre layers being made of mineral wool.” Thus, B-E-H merely discloses that the outer layer and “every other layer” is made of a glass fibre, but does not discuss the composition of the inner most layer. Accordingly, B-E-H suggests that the composition of the inner most layer depends on whether the number of layers is odd or even. Applicants have previously expressed that the applicability of the citation of lines 55-60 on page 3 of B-E-H, which discuss the density of the finished cover and a comparison to “straight glas fibres,” both elements that are not discussed in this portion of claim 1, is not understood, but not received clarification in this regard.

According to B-E-H, the process starts with two mats superimposed with each other. Applicants respectfully submit that if one were to put several mats onto a mandrel and wind it thereon revolution by revolution, because of the different diameters acting on each of the mats, the trailing ends thereof will not rest on the same place at the outside of the finished sleeve. In

other words, the trailing end of the outer layer will rest at the sleeve body at a position where the trailing end of the inner layer is not reached. Thus, the outer layer of such construction typically does not completely surround the roll so that the second layer will be visible from the outside. B-E-H in this way also fails to disclose, teach or suggest “providing a continuous nonwoven web made of mineral wool” as recited in claim 1.

Amended claim 1 further recites, *inter alia*, a “[p]rocess for producing pipe sleeves made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, comprising... *feeding at least one reinforcing layer into the winder before the nonwoven web runs into the winder*, thereby providing said one reinforcing layer before inclusion of the nonwoven web in the pipe sleeve, and providing said one reinforcing layer in such a way that during the winding said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result” (emphases added). Contrastingly, and as admitted by the Examiner on page 6 of the Office Action, B-E-H merely discloses the *presence* of a reinforcing layer, but fails to disclose that a reinforcing layer is *fed* “into the winder *before* the nonwoven web runs into the winder, thereby providing said one reinforcing layer before inclusion of the nonwoven web in the pipe sleeve, and providing said one reinforcing layer in such a way that during the winding said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result” (emphases added) as recited in claim 1.

Also, Applicants note that no explicit teaching is given in B-E-H to provide a reinforcing layer at the outer circumferential side of a sleeve body which is wound all around. Moreover, no teaching is given that such outer layer may act as a trickle guard. Due to the presence of the slits

of B-E-H, the asserted reinforcing layer of B-E-H is not and cannot be “an outer sheath reinforcing layer added to a trailing end of the nonwoven web such that a leading end of the outer sheath reinforcing layer overlaps the trailing end section of the nonwoven web … in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as an outer layer, *the outer sheath reinforcing layer arranged around the full circumference, completely circumferentially around the coil*” (emphases added) as recited in claim 1.

Applicants note that the Examiner agrees that B-E-H “does not disclose providing an outer sheath reinforcing layer added to the trailing end of the nonwoven web after providing the reinforcing layer in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as an outer layer, the outer sheath reinforcing layer arranged around the full circumference,” recited in claim 1 and according to which the reinforcing layer is added to the trailing end of the nonwoven web. To account for this deficiency, the Examiner cites Seitz, asserting that “Seitz discloses a process for making an insulating shell for thermal insulation of pipelines (i.e. a pipe sleeve) (P2IL1-5), comprising rock wool (i.e. mineral wool) having an outer layer of glass wool (i.e. an outer sheath reinforcing layer) (P2IL10-16). Seitz discloses that the outer layer of glass wool layer is produced by coiling the outer layer of glass wool layer on a mandrel after coiling on the inner rock wool layer (i.e. added after providing the inner layer in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of lamination, as an outer layer) (PAIL1 17-125). It is clear from Figure 1 that the outer layer is arranged around the full circumference. Seitz

discloses that the outer layer of glass wool improves the rigidity and substantially facilitates handling (P21L13-15). It is clear that since the outer layer is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.”

Applicants respectfully submit that Seitz fails to cure the Examiner admitted deficiency and further deficiencies discussed above of B-E-H not disclosing:

providing a *continuous* nonwoven web made of mineral wool... winding up the nonwoven web on a winding mandrel of a winder... *feeding at least one reinforcing layer into the winder before the nonwoven web runs into the winder*... in such a way that during the winding said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result; and *providing an outer sheath reinforcing layer added to a trailing end of the nonwoven web such that a leading end of the outer sheath reinforcing layer overlaps the trailing end section of the nonwoven web*... in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as an outer layer, *the outer sheath reinforcing layer arranged around the full circumference, completely circumferentially around the coil*

as recited in amended claim 1 (emphases added).

Seitz discloses “a cylindrical, tubular insulating member for the insulation of pipelines. The member is produced as a complete cylindrical tube... it is then cut along its median plane for the purpose of installation on pipelines.” See Seitz page 2, col. 48-54. Thus, at least as the tube of Seitz is directed to be “cut along its median plane,” Seitz fails to disclose a “*continuous* nonwoven web made of mineral wool” as recited in the claims.

Further, Seitz fails at least because the pipe of Seitz comprises only two layers, of two different mineral wools, preferably one rock, one glass. As clearly seen in Seitz Fig. 1, the two layers are wrapped one after the other, with no overlap therebetween. Seitz discloses that “insulating member 1 can be made by impregnating the wools and curing an insulating shell for a pipeline being

made by wrapping the two impregnated layers *separately* along a mandrel" (emphasis added). *See* Seitz Abstract. Further, the Examiner interprets the layer as part of the pipe sleeve, and not an additional reinforcing layer. Hence, there is not only *no* disclosure in Seitz to add a reinforcing layer *before* the inclusion of nonwoven web in the pipe sleeve, but there is also *no* disclosure to add a reinforcing layer to the trailing end of the nonwoven web. Accordingly, Seitz does not and cannot disclose a pipe sleeve having a reinforcing layer arranged around the full circumference of the sleeve body, as presently claimed.

Therefore, Applicants respectfully submit that Seitz fails to cure the deficiencies of B-E-H with respect to independent claim 1. Accordingly, the features of independent claim 1 are patentable, and claim 1 is patentable over B-E-H and Seitz, whether individually, or in combination.

Similarly, all claims dependent from claim 1, including claims 2, 6-8, 10, 14 and 19, are patentable over B-E-H and Seitz, whether applied individually, or in combination, at least because of their dependency from claim 1. Applicants assert that the claims dependent from claim 1 have additional patentable features. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections thereto.

Rejection of claim 5 over B-E-H in view of Seitz, as applied to claim 1 above, and Hofmann

Claim 5 depends from an amended claim and, as amended, the rejection thereto is respectfully traversed.

With respect to dependent claim 5, rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 1 above, in view of Hofmann, Applicants submit that Hofmann fails to cure the deficiencies of the combination of B-E-H and Seitz with respect to independent claim 1, as discussed above. For example, Hofmann again discusses a split pipe sleeve, thereby unable to provide at least “the outer sheath reinforcing layer arranged around the full circumference, completely circumferentially around the coil” as recited in Applicants’ present claims. Hofmann even discusses that an additional “thin insulating layer **26** is inserted between the confronting faces of the sheath...” thereby further making it impossible for “the outer sheath reinforcing layer arranged around the full circumference, completely circumferentially around the coil” as recited in Applicants’ independent claim 1.

Thus, for at least these reasons, the cited combination fails. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection thereto.

Rejection of claim 3 over B-E-H in view of Seitz, as applied to claim 2 above, and Roth

Claim 3 depends from an amended claim and, as amended, the rejection thereto is respectfully traversed.

With respect to claim 3, rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over B-E-H in view of Seitz, as applied to claim 2 above, in view of Roth, Applicants respectfully submit that Roth fails to cure the deficiencies of the combination of B-E-H and Seitz with respect to amended independent claim 1, which claims 2 and 3 depend from, directly and indirectly, respectively, as discussed above. Applicants further respectfully submit

that while the Examiner's introduction of Roth on page 12 of the Office Action is admittedly to address that "Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer comprises a plurality of separate strips," as recited in Applicants' dependent claim 3, in contrast to the presently claimed subject matter, the asserted "bracing strips" of Roth do not perform the same function or provide the same structure as the instant reinforcing layer. Roth merely discloses "the bracing strips mounted to the carrier web at positions between the compressible strips... being constructed so as to have a compression strength in a direction at a right angle to the plane of the carrier web which is substantially greater than a compression strength of the compressible strips... so that... the plurality of compressible strips are compressed in a wedge shape having a progressively reduced width with increased distance from the carrier web." See Roth col. 2, lines 50-60. However, Roth does not disclose, teach or suggest, *inter alia*, "feeding at least one reinforcing layer *into the winder* before the nonwoven web runs into the winder, thereby providing said *at least one reinforcing layer before inclusion of the nonwoven web in the pipe sleeve*, and providing said at least one reinforcing layer in such a way that during the winding said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result" as recited in independent claim 1 and referred to in dependent claim 3. At least for this reason, Roth and therefore the cited art fails, whether individually or in combination. Further Applicants respectfully submit that the asserted motivation fails, at least because the pipe of Roth resultingly does not have a uniform density, wall size and ratio, whereas page 2 of B-E-H discloses that such characteristics are desirable and that the process of B-E-H is monitored to "thereby provid[e] the

desired control of the wall thickness" and "ensure a close control of the density, wall size and ratio of one mat to the other in the finished product."

Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection thereto.

Rejection of claim 11 over B-E-H in view of Seitz, as applied to claim 9 above, in view of Roth

Claim 9 has been canceled without prejudice or disclaimer to the contents therein. The dependency of claim 11 has been amended to pending claim 1, not discussed with respect to this rejection. Therefore, the rejection thereto is moot.

Rejection of claim 13 over Lauren in view of Seitz

Claim 13 has been amended and, as amended, the rejection thereto is respectfully traversed. With respect to claim 13, rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Lauren in view of Seitz, Applicants respectfully submit that not only has the Examiner not made a *prima facie* case of obviousness, but also that the combination is improper and thus fails.

Firstly, and in contrast to the claimed subject matter, Lauren fails to disclose, teach or suggest "a *roll of continuous* nonwoven web made of mineral wool" (emphases added) as recited in the claim. Lauren discloses instead "two semi-cylindrical halves of the sleeve from *a slab* of mineral wool... surface which will form the inner surface of the sleeve is provided with a number of *V-shaped slits* which enable the slab to be bent into a semi-cylindrical form when

inserted into an eternal mould" (emphases added). *See* Lauren col. 1, lines 60-67. As the Examiner has applied Seitz only to resolve the admitted deficiency that "Lauren does not disclose a reinforcing layer in the form of a trickle guard would circumferentially around it," wrapping the sleeve of Lauren with any sort of reinforcing layer would not cure the defects inherent in Lauren by the presence of slabs containing V-shaped slits, and thus the combination fails to make a *prima facie* case of obviousness.

Secondly, col. 4, lines 54-64 of Lauren discloses that the "inner layer 3, which also consists of mineral wool" while page 2, lines 10-16 of Seitz discloses an "outer layer of glass wool." Thus, the asserted combination not only fails to disclose use of the same material for the reinforcing layer, but further, fails to disclose, "the outer sheath reinforcing layer provided as one of or a combination of a glass nonwoven or a woven glass fibre fabric; or includes one of a particulate material, a particulate infrared radiation absorbing material or a particulate heat shielding material; or includes one of a foil material, or a heat reflective foil containing a metal; or is treated with a biocide agent," as recited in amended claim 13.

Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection thereto.

Rejection of claims 9, 15, 16 and 20 over Blau et al. in view of Seitz and B-E-H

Claim 9 has been canceled without prejudice or disclaimer to the contents therein. The dependency of claims 15, 16 and 20 has been amended to pending claim 1, not discussed with respect to this rejection. Therefore, the rejections thereto are moot.

Rejection of claim 17 over B-E-H in view of Seitz, as applied to claim 9 above, in view of Hartranft et al.

Claim 9 has been canceled without prejudice or disclaimer to the contents therein. The dependency of claim 17 has been amended to pending claim 1, not discussed with respect to this rejection. Therefore, the rejection thereto is moot.

As discussed above, Applicants respectfully submit that amended independent claims 1 and 13 are patentable over the cited prior art, an indication of which is kindly requested.

Applicants respectfully submit that the teachings of B-E-H and Seitz, when considered, do not disclose the features of amended independent claim 1. Dependent claims 2, 3, 5-8, 10, 15-17, 19 and 20 depend from independent claim 1. Accordingly, Applicants submit that dependent claims 2, 3, 5-8, 10, 15-17, 19 and 20 are patentable at least by virtue of their dependency.

Applicants respectfully submit that the teachings of Lauren in view of Seitz, when considered as discussed above, do not disclose the features of claim 13.

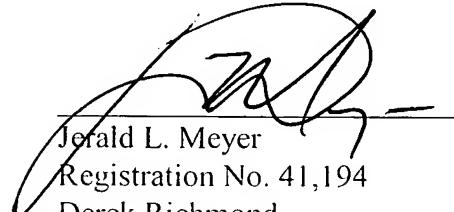
Applicants respectfully submit that none of the cited art references, as applied, whether individually or in combination, disclose the features of the present claims. It is therefore respectfully submitted that the rejections under 35 U.S.C. 103(a) should be withdrawn.

CONCLUSION

In light of the foregoing, Applicants submit that the application is in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner call the undersigned.

Respectfully submitted,

THE NATH LAW GROUP



Jerald L. Meyer
Registration No. 41,194
Derek Richmond
Registration No. 45,771
Jiaxiao Zhang
Registration No. 63,235
Customer No. 20529

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THE NATH LAW GROUP
112 South West Street
Alexandria, VA 22314-2891
Tel: 703-548-6284
Fax: 703-683-8396